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June 13, 1985

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4344 IDS Center
Minneapolis, MN 55402

Stephen Shakman, Esq.
Minnesota Pollution Control Agency
1935 West County Road B-2
Roseville, MN 55113

Re: U.S.A., et al. v. Reilly Tar &
Chemical Corporation, et al.

Dear Counsel:

Enclosed please find a draft Consent Decree and Remedial Action Plan dated June 13, 1985 incorporating some but not all of the modifications discussed over the past few weeks. There may be additions or deletions that vary from our recent discussions and on which the parties have not closed. It is understood that these changes will be discussed in Minneapolis next week and that we will work from the enclosed drafts in reaching final agreement among the United States, the State, St. Louis Park and Reilly on the Consent Decree and RAP.

If you have any questions on the enclosed drafts, please call.

Very truly yours,

Becky A. Comstock

Becky A. Comstock

BAC:kll
Encs.
cc: Robert Leininger
Robert Polack

Broad Spectrum Analysis.

Add at end of 9.3.3 of the RAP

The Regional Administrator, the Commissioner, and the Director may request that one or more of the samples collected during ~~the first and/or second~~ Any sampling round be subjected to an extended analysis ~~instead of PAHs or phenolics. The extended analysis shall include~~ comprising priority pollutants, volatiles, acids, ~~& flash~~ Base neutrals, and metals (40 CFR Part 122, Appendix B), plus ammonia, choloride, sodium and sulfate. For every such sample that is subjected to the extended analysis instead of PAHs and phenolics, one sample for PAHs and phenolics for the first year after the Effective DAte pursuant to Section 9.6 below shall be eliminated.

Add at end of 9.6 of the RAP.

The number of samples for PAHs and phenolics monitoring in the first year after the Effective Date shall be reduced by one sample for every sample subjected to an extended analysis pursuant to Section 9.3.3.

David Hird recommends that if the above language of John Craun is acceptable to EPA, the following be included:
(Insert if the above only applies to the Northern Area)

It is understood among the parties that the presence of chemical substances in the Northern Area is not Known to the Parties and monitoring for items in the extended analysis in and of itself does not constitute and adequate measure of treatment for purposes of Sections U.5 and U.6 of the Consent Decree.
(Insert if the Craun langauge applies to all areas.)

Monitoring for items in the extended analysis in and of itself does not constitute an adequate measure of treatment for purposes of Sections U.5 and U.6 of the Consent Decree.

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June 13, 1985

VIA FEDERAL EXPRESS

David Hird, Esq.
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VIA MESSENGER

Steve Shakman, Esq.
Minn. Pollution Control Agency
1935 West County Road B2
Roseville, MN 55113

Re: United States, et al. v.
Reilly Tar & Chemical Corporation
Our File No. 3857-011
Civ. File No. 4-80-469

Gentlemen:

Enclosed for your review please find a copy of the agreement reached between the City and Reilly.

Very truly yours,

Elizabeth A. Thompson

EAT/jmp/2406w
Enclosure

cc: Wayne G. Popham, Esq.
Allen W. Hinderaker, Esq.
Mr. James L. Brimeyer

June 13, 1985
DRAFT

EXHIBIT A
REMEDIAL ACTION PLAN

INTRODUCTION AND PURPOSE.

The objectives of this Remedial Action Plan (hereinafter referred to as RAP) are to accomplish the following: provide a safe drinking water supply in sufficient quantity for the City of St. Louis Park and surrounding communities; to control the spread of Contamination in the Drift-Platteville, St. Peter, Prairie du Chien-Jordan, Ironton-Galesville, and Mt. Simon-Hinckley aquifers resulting from activities at the Site which was owned and operated by the Reilly Tar & Chemical Corporation, and whose present ownership is described in Part C of the Consent Decreee; to allow for the safe, reasonable, and beneficial use of the Site and adjacent Contaminated areas; and to preserve and protect ground water resources for present and future use.

These objectives will be accomplished by installation of a granular activated carbon (GAC) drinking water treatment system at St. Louis Park municipal wells numbers 10 and 15; a system of pumping wells designed to remove and/or control the flow of PAH Contaminants in aquifers beneath St. Louis Park; remedial actions at and around the Site which will reduce the infiltration of water, thus controlling the movement of PAH

from Contaminated surficial geological deposits and allowing for safe use of the Site and adjacent contaminated areas; Monitoring of Contaminants in all aquifers and in drinking water for St. Louis Park and selected neighboring communities to track their movement and monitor their occurrence in drinking water; and other actions which will be implemented if Contaminants are found to move in a manner which is not anticipated at this time. The specifics of these actions are contained in this RAP.

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1.

DEFINITIONS

As used in this RAP, the following words and phrases shall have these meanings:

1.1. Additional Carcinogenic PAH: Compounds designated pursuant to Part D.1. of the Consent Decree.

1.2. Advisory Levels: means the Concentrations of Carcinogenic PAH, Other PAH or the sum of benzo(a)pyrene and dibenz(a,h)anthracene as defined in Section 2.2. of this RAP, or as established under the procedures of Part D.1.

1.3. Carcinogenic PAH: Means those PAH compounds listed in Appendix A as being suspected human carcinogens. For Monitoring purposes, the concentration of Carcinogenic PAH shall be the sum of the concentrations of all compounds listed in Parts A.1.1. and A.2. of Appendix A.

1.4. Commissioner: The Commissioner of the Minnesota Department of Health.

1.5. Contamination or Contaminants: PAH and Phenolics resulting from activities of Reilly at the Site when found in the ground water or the soil.

1.6. Day: when used in this RAP to indicate a deadline for a required action, means a calendar day. Whenever a submittal or action required by this RAP falls on a Saturday, Sunday or Minnesota State or Federal legal holiday, the submittal or action shall be due upon the next following day of business.

1.7. Director: Means the Executive Director of the Minnesota Pollution Control Agency.

1.8. Drinking Water Criteria: Means concentrations of Carcinogenic PAH, Other PAH or the sum of benzo(a)pyrene and dibenz(a,h)anthracene as defined in Section 2.2. of the RAP, or as established under the procedures in Part D.1.

1.9. Effective Date: Means the effective date of the Consent Decree.

1.10. EPA: Means the United States Environmental Protection Agency.

1.11. HRA: Means the Housing and Redevelopment Authority of St. Louis Park.

1.12. MDH: Means the Minnesota Department of Health.

1.13. MWCC: Means the Metropolitan Waste Control Commission.

1.14. Monitor: Means to collect a sample and analyze for Carcinogenic and Other PAH, as well as for any other parameters specified, in accordance with the sampling and analytical plans required under Section 3. of this RAP.

1.15. MPCA: Means the Minnesota Pollution Control Agency.

1.16. Other PAH: PAH compounds other than those which are presently known to be suspected human carcinogens. For Monitoring purposes, the concentration of Other PAH is defined as the sum of the concentrations of all compounds listed in Part A.1.2. of Appendix A.

1.17. PAH (polynuclear aromatic hydrocarbons): Means chemical compounds consisting of carbon and hydrogen atoms contained in

two or more fused aromatic rings, with each ring consisting of five or six carbon atoms. This term also includes alkyl-substituted, aryl-substituted and heterocyclic PAH (compounds in which one or more carbon atoms in a ring are replaced with nitrogen, oxygen, and/or sulfur atoms). This term also includes biphenyl and alkylated biphenyls.

1.18. Phenolics: Means aromatic organic compounds substituted with one or more hydroxyl groups, which are detected by the 4-aminoantipyrene method, EPA method 420.1 or 420.2 or other method as approved by the Director and Regional Administrator in accordance with Part G. or H. of the Consent Decree.

1.19. Regional Administrator: Means the Regional Administrator of the EPA Region in which the Site is located (currently Region V).

1.20. Reilly: Means the Reilly Tar & Chemical Corporation.

1.21. Site: Means the Republic Creosote Site in St. Louis Park, operated by the Reilly Tar & Chemical Corporation from 1917 to 1972, whose legal description is cited in Part C.1. of the Consent Decree. The Site is bounded by an imaginary line extending south from the terminus of Pennsylvania Avenue south of 31st street on the west; an imaginary line extending westward from the intersection of Louisiana Avenue and 32nd Street on the north; Louisiana Avenue from 32nd Street to Gorham Street, Gorham Street from Louisiana Avenue to 2nd Street NW, 2nd Street NW from Gorham Street to Republic Avenue,

Republic Avenue from 2nd Street NW to 1st Street NW, and 1st Street NW from Republic Avenue to Walker Street on the east; and Walker Street on the south.

1.20. Total PAH: Means the sum of the concentrations of all Carcinogenic PAH and Other PAH listed in Parts A.1.1., A.1.2., and, if detected, Part A.2. of Appendix A.

2.

GENERAL PROVISIONS

2.1. Well Numbering

Each well referenced in this RAP by a number preceded by "W" or "P" refers to the well identified by this unique number in the report, "Preliminary Evaluation of Ground-Water Contamination by Coal Tar Derivatives, St. Louis Park Area, Minnesota", by M. F. Hult and M. E. Schoenberg, United States Geological Survey, Water Supply Paper 2211, 1984, or otherwise assigned by the United States Geological Survey. Each well referenced in this RAP by a number preceded by "SLP" refers to the municipal water supply well of St. Louis Park having this unique number. For convenience in this RAP and in subsequent reports, project numbers using the USGS numbering system may be assigned to new wells required by this RAP and to other wells not having a USGS designation. Wells not designated in this RAP may receive project numbers upon concurrence of all Project Leaders as defined in Part O. of the Consent Decree.

2.2. Drinking Water Criteria and Advisory Levels

The Drinking Water Criteria and Advisory Levels defined below shall apply to drinking water which is treated to remove PAH and to ground water which is Monitored as required by this RAP:

Parameter	Advisory Level	Drinking Water Criterion
Benzo(a)pyrene plus Dibenz(a,h)anthracene	3.0 ng/l*	5.6 ng/l
Carcinogenic PAH	15 ng/l**	28 ng/l**
Other PAH	175 ng/l	280 ng/l

* Or lowest concentration that can be quantified, whichever is greater.

** Unless other Concentrations are established in accordance with the procedures specified in Part D.1 of the Consent Decree.

The Commissioner may require that the use of any drinking water supply well whose water exceeds any of these Drinking Water Criteria, as determined in accordance with Section 12.1., be discontinued until such time as the Drinking Water Criteria are met by treatment or other means. Compliance with these Drinking Water Criteria shall be determined at the point at which the water in question is introduced to the water supply distribution system but before dilution with water from any other source. The Advisory Levels for Carcinogenic PAH and benzo(a)pyrene and dibenz(a,h)anthracene are used in Section 4. as operational and cessation criteria for drinking water treatment systems. The Advisory Levels are also used in this RAP to trigger increased Monitoring requirements.

2.3. Quinoline

In the event quinoline is detected in any sample, and no other Carcinogenic PAH compound listed in Parts A.1.1. and A.2. of Appendix A or added pursuant to Part D.1. of the

Consent Decree is detected in the same sample, it shall be limited under the criterion for Other PAH compounds.

2.4. Well Construction and Abandonment

All wells installed reconstructed or abandoned in compliance with the requirements of this RAP shall be constructed or abandoned in accordance with all applicable provisions of the MDH well construction code (Minn. Rules Parts 4250.2500-4250.3000 (1983)) and future amendments thereto, including requirements for notification of and approval by the Commissioner.

2.5. Surface Water Discharge Criteria

In each case where Reilly is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for a surface water discharge which is part of a remedial action implemented under this RAP, the Director shall prepare a draft NPDES permit in accordance with Minn. Rules Part 7001.0100, Subp. 2 (1984 Supp.). The draft permit shall contain the following effluent limitations:

Parameter	Daily Maximum Concentration	30-day Average Concentration
Carcinogenic PAH	---	311 ng/l
Other PAH	34 ug/l	17 ug/l
Phenanthrene	2 ug/l	1 ug/l
Phenolics	---	10 ug/l

These limitations may be adjusted in the draft permit to allow for dilution if the discharge is to a stream which does not

have a seven day-ten year low flow (7Q10) of zero. The draft permit is subject to change in accordance with Minn. Rules Ch. 7001 (1984 Supp.) and subject to EPA authority pursuant to the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et. seq. In the event the limitations are changed for any discharge required by this RAP, and the reasons for changing the limitations are applicable to discharges for which NPDES permits are subsequently proposed in accordance with this RAP, the Director may propose these changed limitations in the subsequent permits. In the draft permit, the Director shall propose weekly Monitoring for the first month, monthly Monitoring for the next quarter, and quarterly Monitoring thereafter.

2.6. Schedule for Contingent Actions

On or before the date specified in the RAP for a contingent action or, where no date is specified, not later than 90 Days following receipt of notification by the Regional Administrator and Director in accordance with Part H. of the Consent Decree that a contingent action is necessary, Reilly shall submit to the Regional Administrator and the Director a plan for the required contingent action, including design specifications and an implementation schedule. The Regional Administrator and the Director shall review the plan in accordance with Part G. of the Consent Decree.

2.7. Plans and Submittals

All plans and submittals pursuant to this RAP are to be prepared and reviewed in accordance with the Consent Decree and the National Contingency Plan (40 C.F.R. Part 300).

2.8. Special Analytical Service

Reilly shall provide the Director, the Commissioner, and the Regional Administrator the results of all Monitoring performed in response to an exceedance of Advisory Levels or Drinking Water Criteria pursuant to Sections 4.3.1.(B), 4.3.2., or 12.1. within 21 Days of taking the samples.

2.9. Discontinuing Sanitary Sewer Discharges

Reilly, at any time, may submit a plan to the Regional Administrator and Director to change the discharge to the storm sewer or a surface water body of any source control or gradient control well that is required to be discharged to the sanitary sewer by the provisions of this RAP. The plan shall describe the proposed construction and operation of the revised discharge, including any treatment required in order to meet the effluent limitations specified in Section 2.5. or other effluent limitations specified in NPDES permits issued pursuant to Section 2.5., and shall include a permitting and implementation schedule and proposed cessation criteria for any treatment. The Regional Administrator and Director shall review the plan in accordance with Part G. of the Consent Decree and approval shall not be unreasonably withheld.

3.

SAMPLING AND QUALITY ASSURANCE

3.1. Applicability

All Monitoring required by the provisions of this RAP shall be done in accordance with approved plans, as required by this Section.

3.2. Initial Sampling Plan

Within 30 Days of the Effective Date, Reilly shall submit to the Director and Regional Administrator a sampling plan for the remainder of 1985 and 1986 for the Mt. Simon-Hinckley, Ironton-Galesville, Prairie du Chien-Jordan, St. Peter, and Drift-Platteville aquifers. The plan shall incorporate requirements of Sections 4.3., 5.1., 6.1.4., 7.3., 8.1.3., 9.1.3, 9.2.3., 9.3.3., and 9.6. below, and shall indicate planned dates for sample collection, analysis and reporting for all of the monitoring and municipal wells required in the above referenced Sections. The plan shall include a detailed laboratory quality assurance/quality control plan and a summary of sampling and analytical procedures, including method detection limits for each procedure, to be followed in all analyses required by this RAP. Included in the plan shall be the name(s) of the primary laboratory(ies) which will be performing analyses, the name(s) of any other laboratory(ies) which may provide backup services, and the

turnaround time(s) (the time interval from receipt of samples to completion of analysis) which the primary laboratory has agreed to provide. The Director and Regional Administrator shall review the plan in accordance with Part G. of the Consent Decree.

3.3. Subsequent Sampling Plans

By October 31 of each year, beginning in 1986, Reilly shall submit to the Regional Administrator and the Director a sampling plan for the coming calendar year that meets the requirements of Section 3.2. In these subsequent plans, Reilly may propose to cease Monitoring certain wells, to change Monitoring locations, to change analytical procedures, or to implement such other changes that may be effective in achieving the Monitoring objectives of this RAP. The Director and Regional Administrator shall review the plan in accordance with Part G. of the Consent Decree.

3.4. Annual Report

By March 15 of each year, beginning in 1986, Reilly shall submit to the Director and Regional Administrator a report of the results of all Monitoring during the previous calendar year. This report shall contain the following information for each aquifer sampled:

(A) Results of all water level measurements and chemical analyses.

(B) For each measuring period in the Prairie du Chien-Jordan, St. Peter, and Drift-Platteville aquifers, a water level contour map with elevations labeled at each well.

(C) For each sampling event, a map showing each well sampled with the concentrations of Other PAH, Carcinogenic PAH and the sum of benzo(a)pyrene and dibenz(a,h)anthracene labeled by the location of each well, and a map with Phenolics concentrations labeled by the location of each well.

(D) For the Drift-Platteville, a discussion of the Monitoring and water level results with respect to the effectiveness of the source and gradient control well systems.

4.

DRINKING WATER TREATMENT SYSTEM AT SLP 10/15

4.1. Design and Construction

4.1.1. Design

Reilly shall develop and submit to the Regional Administrator, the Director, and the Commissioner a complete design, including plans and specifications, for the construction of a granular activated carbon (GAC) treatment system at the St. Louis Park municipal drinking water wells SLP 10 and SLP 15, and shall submit applications for necessary permits. The Regional Administrator, the Director, and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

4.1.2. Construction

Reilly shall fully construct the GAC treatment system in accordance with the approved design by October 15, 1985. This October 15, 1985 deadline shall be extended by one Day for each Day that the design is being reviewed by and until notice of approval or modification is received from the Regional Administrator, the Director and the Commissioner. Any modifications to the design made by the Regional Administrator, the Director and the Commissioner which require subsequent revision of the design plans by Reilly, shall extend the October 15, 1985 deadline by seven Days.

4.1.3. Design Criteria

The GAC water treatment system shall be designed and constructed by Reilly in accordance with the following criteria, which will satisfy the objectives of the EPA Record of Decision dated June 6, 1984.

Item	Design Value
Feed Water	Water from wells SLP 15 alone, SLP 10 alone, or SLP 10 and 15, after such waters have been treated in the existing pressure sand filters.
Flow Rate	1200 gpm capacity
Raw Water Concentration	Up to 20,000 ng/1 Total PAH
Treated Water PAH Concentration	Shall meet the Drinking Water Criteria defined in Section 2.2. and shall be operated according to Section 4.3.2.
Building	The GAC system shall be enclosed within a building with heating, lighting, landscaping, and architectural design compatible with the existing treatment building at SLP 10 and 15.
Mini-columns	At least three mini-columns shall be installed within the GAC system building and shall be designed in such a manner as to allow testing of alternate carbons and/or prediction of breakthrough at conditions comparable to those in the full-scale system.
Space for Additional Carbon Column(s)	The building to house the GAC system shall be designed to accommodate the construction of an additional column(s) which may be required to be placed in series with the original columns pursuant to Section 4.5.

4.1.4. Inspection

Reilly shall provide written notification to the Regional Administrator, the Director, and the Commissioner within 3 Days of completing construction of the GAC treatment system pursuant to the approved design. Following receipt of such notification, the Regional Administrator, the Director, and the Commissioner shall inspect the system and Reilly shall demonstrate that the system has been constructed and operates in accordance with the approved design. This inspection shall not include demonstration of system performance, which is addressed by Section 4.1.5.

4.1.5. Testing

Within 60 Days of completing construction, Reilly shall perform a two-week test of the GAC treatment system and submit a report to the Regional Administrator, the Director, and the Commissioner on the results of this test. During the testing period, treated water from the GAC system shall be discharged to a storm sewer and the system shall be Monitored as required by Section 4.3. below. The test report shall identify any changes in the as-installed design from the approved design and shall include the following data from the test period: analytical results for all Monitoring samples, system flow rates, pressure readings, observations of the operators, and any other information pertinent for evaluating the performance of the GAC treatment system.

4.1.6. Approval

Following inspection of the treatment system and submission of the testing report pursuant to Sections 4.1.4. and 4.1.5., respectively, the Regional Administrator, the Director, and the Commissioner, in accordance with Part G. of the Consent Decree, shall notify Reilly in writing as to whether the treatment system is approved or disapproved. When Reilly receives notice that the treatment system is approved, Reilly shall operate and Monitor the system in accordance with Sections 4.2. and 4.3. below.

4.2. Operation and Maintenance

4.2.1. Operating Rate

Reilly shall operate wells SLP 10 and/or SLP 15 and the GAC treatment system at a minimum annual pumping rate of 200 million gallons per year, with a minimum pumping rate of 10 million gallons in any calendar month, once the GAC system has achieved routine operation pursuant to Section 4.3.1.(B). Reilly shall not restrict St. Louis Park's use of these wells up to the maximum flow rate of the GAC treatment system.

4.2.2. Operating Period

Reilly shall operate the GAC treatment system whenever wells SLP 10 and/or SLP,15 are used to supply St. Louis Park's potable water distribution system until such time as the Director and Regional Administrator approve discontinuing use of the system pursuant to Section 4.4. below.

4.2.3. Maintenance

Reilly shall maintain the GAC system in good working condition as required to achieve reliably treated water that meets the Drinking Water Criteria, as determined by the Monitoring required by Section 4.3. below.

4.2.4. Operation and Maintenance Plan

Within 180 Days of receipt of approval of the design, Reilly shall submit a plan to the Director, the Regional Administrator, and the Commissioner for the operation and maintenance of the GAC treatment system. The Regional Administrator, the Director, and the Commissioner shall review the plan in acordance with Part G. of the Consent Decree.

4.2.5. Carbon Disposal

Reilly shall transport and dispose of or provide for the regeneration of spent carbon from the GAC treatment system in accordance with Part T of the Consent Decree.

4.3. Monitoring

4.3.1. Treated Water

Treated water from the GAC system shall be Monitored as follows:

(A) During the testing period prior to hookup, Reilly shall Monitor three times per week.

(B) During the first month following approval of the system and connection to the St. Louis Park

drinking water distribution system, Reilly shall Monitor weekly and submit the results to the Regional Administrator, the Director and the Commissioner in accordance with Section 2.8. Thereafter, Reilly shall Monitor monthly as described in (C) below. In accordance with Part G. of the Consent Decree, the Regional Administrator, the Director shall either (1) determine that the system is operating properly and authorize Reilly to continue the routine Monitoring frequency described in (C) below; or (2) if the determination is made that the results do not indicate proper operation of the system, shall require Reilly to resume weekly Monitoring for a period not to exceed two months or to remove the GAC system from the distribution system and conduct further testing of the system, modification of the system, or other action as required by the Regional Administrator, the Director and the Commissioner.

(C) Routine Monitoring shall be monthly until the carbon has been replaced twice. If Advisory Levels or Drinking Water Criteria are exceeded during the first year of operation of the system, Reilly shall immediately notify the Regional

Administrator, the Director, and the Commissioner, and shall submit a plan for such additional Monitoring, testing, modification of the system, or other action as may be appropriate. The Regional Administrator, Director, and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

(D) Routine Monitoring after two carbon changes shall be quarterly, unless the Regional Administrator, the Director, and the Commissioner determine that the observed service life of the carbon is too short to permit this frequency, in which case the Director and Regional Administrator shall notify Reilly of the required Monitoring frequency in accordance with Part G. of the Consent Decree.

4.3.2. Carbon Replacement Monitoring

(A) If the analytical results from any treated water sample obtained pursuant to Section 4.3.1. exceed the Drinking Water Criterion for Other PAH or exceed the Advisory Levels for Carcinogenic PAH or benzo(a)pyrene and dibenz(a,h)anthracene, then Reilly shall collect two additional treated water samples at least 2 Days apart within one week of

receiving the results of the exceedance sample. If the analytical results from either one or both of the two additional samples also exceed the Drinking Water Criterion for Other PAH or the Advisory Levels for Carcinogenic PAH or benzo(a)pyrene and dibenz(a,h)anthracene, then the carbon shall be replaced within 21 Days of receiving the additional sample results.

(B) If the analytical results from any treated water sample obtained pursuant to Section 4.3.1. exceed Advisory Levels for Other PAH, then Monitoring of treated water shall be conducted immediately according to Section 12.1. If the results of any two samples required by Section 12.1. exceed the Drinking Water Criteria for Other PAH, then the carbon shall be replaced within 21 Days of receiving the additional sample results.

(C) Following replacement of carbon, treated water shall be Monitored weekly for one month and in accordance with the Monitoring requirements of Section 4.3.1. thereafter.

(D) If excedance of Drinking Water Criteria for Other PAH or Advisory Levels for Carcinogenic PAH or benzo(a)pyrene and dibenz(a,h)anthracene is confirmed, the Commissioner may direct that wells

SLP 10 and/or SLP 15 be removed from active service until Carbon is replaced.

4.3.3. Feed Water

Feed water to the GAC system (i.e. water treated by the existing pressure sand filters) shall be Monitored at the same time as treated water from the GAC system is Monitored at the following intervals:

(A) During the testing period prior to hookup, feed water shall be Monitored twice per week.

(B) During the first month after connection to the distribution system, feed water shall be Monitored biweekly.

(C) After the first month of operation, Monitoring of feed water shall be performed quarterly until the carbon has been changed twice. If the Regional Administrator and the Director determine pursuant to Section 4.3.1.(B) that the GAC system is not operating properly, Reilly may, upon receipt of such determination, be required to resume biweekly Monitoring of feed water.

(D) After two carbon changes in the GAC system, feed water shall be Monitored annually.

4.3.4. Extended Monitoring

Treated water from the GAC system shall be sampled and analyzed annually for the extended list of PAH in Part A.2. of

Appendix A below, using gas chromatography/mass spectroscopy (GC/MS), or other methods approved by the Regional Administrator and the Director. During this extended analysis, any compounds listed in Part A.2. of Appendix A, or any other compounds which are detected with significant peak heights that are not routinely Monitored, shall be identified and, if possible, quantified, using a mass spectral library which contains extensive spectra of PAH compounds, such as the National Bureau of Standards mass spectral library. Reilly shall analyze a sample of treated or feed water once a year for the acid fraction compounds determined by U.S. EPA Test Method 625 or by other methods approved by the Regional Administrator and the Director.

4.3.5. Reporting

By March 15 of each year, beginning in 1986, Reilly shall submit to the Regional Administrator, Director, and Commissioner a report of the results of all Monitoring of the GAC treatment system during the previous calendar year. This report shall contain the results of each analysis of feed water to and treated water from the GAC system and of wellhead water from SLP 10 and/or SLP 15, regardless of whether the analyses were required by this RAP. The report shall also describe briefly the operating performance of the GAC system during the previous calendar year.

4.4. Cessation

For purposes of this Section, the cessation criteria are defined as the mean plus one standard deviation of at least six consecutive feed water samples collected bimonthly being less than the Drinking Water Criteria for PAH and the mean of such samples being less than the Advisory Levels for Carcinogenic PAH and benzo(a)pyrene and dibenz(a,h)anthracene. Reilly may submit a request to the Regional Administrator, Director, and Commissioner documenting that the cessation criteria have been met and requesting that the GAC system operation be ceased. Approval of such a request shall not be unreasonably withheld and any disputes shall be resolved in accordance with Part I. of the Consent Decree. Once operation is ceased, the former GAC system feed water (i.e., the effluent from the existing pressure sand filters) shall be Monitored quarterly for two years and annually thereafter as long as results of wellhead Monitoring at SLP 10 or SLP 15 required by Section 7.3. exceed Drinking Water Criteria. If any results from this post-operation Monitoring exceed an Advisory Level or Drinking Water Criterion for PAH, then Monitoring of the former feed water shall be conducted according to Section 12.1. and the GAC system shall be restarted if such Monitoring yields three samples exceeding the Drinking Water Criteria for PAH. Nothing in this RAP shall be construed to prevent Reilly or St. Louis Park from operating the GAC treatment system after the cessation criteria have been met.

4.5. Contingent Actions

In the event that the first two carbon replacement intervals are both less than one year, the Regional Administrator and the Director may require Reilly to add an additional carbon column(s) in series with the column(s) installed pursuant to Section 4.1. Within 60 Days of receiving such notification Reilly shall submit to the Regional Administrator and the Director a design, a construction plan and schedule, an operation plan, and a Monitoring plan for installing and operating additional carbon column(s) in series. Reilly shall construct and operate such additional column(s) in accordance with the design, plans and schedule approved by the Regional Administrator and the Director in accordance with Part G. of the Consent Decree.

5.

MOUNT SIMON-HINCKLEY AQUIFER

5.1. Monitoring

Within 180 Days of the Effective Date, Reilly shall Monitor SLP 11, 12, 13 and 17, and these wells shall be Monitored annually thereafter.

5.2. Thirtieth Year Evaluation.

Reilly, the State and the United States presently share the opinion that migration of Contamination from the Site to SLP 11, 12, 13, or 17 will take substantially longer than 30 years, if it occurs at all; nevertheless it is agreed that these parties should reevaluate the need for Monitoring and contingent action by the thirtieth anniversary of the Effective Date. Accordingly, Reilly shall within six months of the 30th anniversary submit a plan to the Regional Administrator and the Director for continued protection of municipal drinking water wells in this aquifer. The Regional Administrator and the Director shall review the plan under Part G of the Consent Decree.

5.3. Contingent Actions

5.3.1. Existing Wells

If the analytical result of any Monitoring required by Section 5.1. above is greater than any Advisory Level or Drinking Water Criterion for Carcinogenic PAH, benzo(a)pyrene and dibenz(a,h)anthracene, or Other PAH, Reilly shall comply with the applicable requirements of Section 12.

5.3.2. New Wells

If any municipal drinking water supply well which withdraws water from the Mt. Simon-Hinckley aquifer is installed within one mile of W23, Reilly shall, following receipt of notification by the Commissioner of installation of the well, Monitor the well at the time of its installation and annually thereafter. If the analytical result of any Monitoring as required above is greater than any Advisory Level or Drinking Water Criterion for Carcinogenic PAH, benzo(a)pyrene and dibenz(a,h)anthracene, or Other PAH, Reilly shall comply with the applicable requirements of Section 12.

6.

IRONTON-GALESVILLE AQUIFER

6.1. Source Control at W105

6.1.1. Plan

Within 60 Days of the Effective Date, Reilly shall submit to the Regional Administrator and the Director a plan to use W105 as a pumping well with an untreated discharge to the sanitary sewer. At the same time, Reilly shall submit to the MWCC an application for a sanitary sewer discharge permit, and shall submit to the Commissioner of Natural Resources an application for a water appropriation permit.

6.1.2. Construction

Within 60 Days of receiving the permits specified in Section 6.1.1. above and receiving approval pursuant to Part G. of the Consent Decree, whichever is later, Reilly shall complete installation of a pump and piping necessary for connection of W105 to the sanitary sewer.

6.1.3. Pumping

Within 5 Days of completing construction as specified in Section 6.1.2. above, Reilly shall commence pumping W105 at a monthly average rate of 25 gallons per minute.

6.1.4. Monitoring

Reilly shall Monitor W105 quarterly for the first year of pumping and biannually thereafter. Water levels in W105 and W38 (the Milwaukee Road well) shall be measured by Reilly each time W105 is sampled.

6.1.5. Cessation

The criterion for cessation of pumping W105 is defined as the mean plus one standard deviation of at least four consecutive samples collected quarterly being less than 10 micrograms per liter Total PAH. Nothwithstanding this cessation criterion, the well shall be pumped for a minimum of two years. Reilly may submit a request to cease pumping W105 to the Regional Administrator and the Director with the data required to document compliance with the cessation criterion. Review of the request shall be in accordance with Part G. of the Consent Decree and approval shall not be unreasonably withheld. Reilly shall Monitor W105 quarterly for the first year after pumping is stopped and biannually thereafter. If any result of such continued Monitoring shows Total PAH greater than 10 micrograms per liter, Reilly shall collect two additional samples within one month of the first result. If either of the two additional samples exceeds 10 micrograms per liter Total PAH, then Reilly shall restart pumping of W105 as required by Section 6.1.3. Nothing in this RAP shall be construed to prevent Reilly or St. Louis Park from pumping W105 after the cessation criterion is met.

6.2. Contingent Actions

6.2.1. Contingent Additional Monitoring or Remedial Action

If any municipal drinking water supply well which withdraws water from the Ironton-Galesville aquifer is

installed within one mile of W23, Reilly shall, following receipt of notification by the Commissioner of installation of the well, Monitor the well at the time of its installation and annually thereafter. If the analytical result of any Monitoring as required above is greater than any Advisory Level or Drinking Water Criterion for Carcinogenic PAH, benzo(a)pyrene and dibenz(a,h)anthracene, or Other PAH, Reilly shall comply with the applicable requirements of Section 12.

6.2.2. Reimbursement for Additional Expenses

In the event any person who submits plans to the MDH for installation of a new well in St. Louis Park or Hopkins in the Mt. Simon-Hinckley aquifer is required by the MDH to safeguard against the spread of Contamination from the Ironton-Galesville to the Mt. Simon-Hinckley aquifer through the use of measures such as additional casings or larger drill holes, Reilly shall upon receipt of notice from the Commissioner pay this person the incremental costs incurred for complying with the requirements of the MDH.

7.

PRAIRIE DU CHIEN-JORDAN AQUIFER

7.1. Source Control At W23

7.1.1. Plan

Within 60 Days of the Effective Date, Reilly shall submit to the Director, the Regional Administrator and the Commissioner a plan to reconstruct W23 as a pumping well with an untreated discharge to the sanitary sewer. At the same time, Reilly shall submit to the MWCC an application for a sanitary sewer discharge permit, and shall submit to the Commissioner of Natural Resources an application for a water appropriation permit.

7.1.2. Construction

Within 30 Days of receiving permits specified in Section 7.1.1. above and receipt of approval pursuant to Part G. of the Consent Decree, whichever is later, Reilly shall complete construction of W23 as a Prairie du Chien-Jordan pumping well and of piping necessary for connection of W23 to the sanitary sewer.

7.1.3. Pumping

Within 5 Days of completing construction as specified in Section 7.1.2., Reilly shall commence pumping W23 at a monthly average rate of 50 gallons per minute.

7.1.4. Cessation

The criterion for cessation of pumping W23 is defined as the mean plus one standard deviation of at least six consecutive samples collected bimonthly being less than 10 micrograms per liter Total PAH. Notwithstanding this cessation criterion, the well shall be pumped for a minimum of five years. Reilly may submit a request to cease pumping W23 to the Regional Administrator and the Director with the data required to document compliance with the cessation criterion. Review of the request shall be in accordance with Part G. of the Consent Decree and approval shall not be unreasonably withheld. Reilly shall Monitor W23 quarterly for the first year after pumping is stopped and semiannually thereafter. If any result of such continued Monitoring shows Total PAH greater than 10 micrograms per liter, Reilly shall collect two additional samples within one month of the first result. If either of the two additional samples exceeds 10 micrograms per liter Total PAH, then Reilly shall restart the pumping of W23 as required by Section 7.1.3. Nothing in this RAP shall be construed to prevent Reilly or St. Louis Park from pumping W23 after the cessation criterion is met.

7.2. Gradient Control

7.2.1. Feasibility Study Plan

Within 30 Days of the Effective Date, Reilly shall submit to the Director and Regional Administrator a plan for a

feasibility study for discharge of 1,000 gallons per minute of water from SLP 4. This study shall examine the feasibility of discharging water from SLP 4 to surface waters, and shall include consultation with governmental entities responsible for the management of the surface water bodies which are considered. The Director and Regional Administrator shall review the plan for this study in accordance with Part G. of the Consent Decree.

7.2.2. Feasibility Study Results

Within 90 Days of receiving approval of the plan, Reilly shall submit to the Director and Regional Administrator a report summarizing the results of the study referenced in Section 7.2.1. above, and which contains recommendations for disposition of water pumped from SLP 4 for gradient control. The Director and Regional Administrator shall review the study in accordance with Part G. of the Consent Decree. At the same time, Reilly shall submit an application for an NPDES permit for a discharge from SLP 4. The Director shall draft and notice the NPDES permit in accordance with Section 2.5.

7.2.3. Treatment

Within 30 Days of the date of receipt of the required NPDES permit, if treatment of the effluent from SLP 4 will be required in order to meet effluent limitations specified in the NPDES permit for PAH or Phenolics, Reilly shall submit to the Director and the Regional Administrator a plan for treatment of

the effluent in order to meet effluent limitations. The Director and Regional Administrator shall review the plan in accordance with Part G. of the Consent Decree.

7.2.4. Completion

Within 60 Days of the date of receipt of the required NPDES permits, Reilly shall complete connection of SLP 4 to the point of discharge, unless the NPDES permit issued for this discharge requires treatment of the discharge, in which event Reilly shall complete installation of the treatment system and connection of SLP 4 to the point of discharge within 120 Days of the date of receipt of the NPDES permit.

7.2.5. Gradient Control Monitoring Wells

Within 30 Days of submitting the report on the Feasibility Study required by Section 7.2.2., Reilly shall submit to the Director, the Regional Administrator and the Commissioner a plan for construction or reconstruction of three Monitoring wells. The wells, which shall be designated by the project numbers indicated in brackets below, shall be completed in the Prairie du Chien-Jordan aquifer and shall have a minimum diameter of four inches. The wells shall be located near the following locations (these are locations of parks or golf courses): the terminus of Homedale Avenue south of Goodrich Street in Hopkins (Interlachen Park) [W401]; Colgate and Drew Avenues in Minneapolis (Waveland Park) [W402]; and France Avenue at West 38th Street in Minneapolis [W403]. The plan may

substitute existing wells located within 2,500 feet of the locations specified for these new wells, provided that the plan includes the results of an investigation of these alternative wells which shows that they are presently in, or can be upgraded to, a condition capable of producing water level and water quality information representative of only the Prairie du Chien and Jordan formations, and that they will be accessible for Monitoring and water level measurements at the required intervals. The Director, Regional Administrator and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree. Within 10 Days following receipt of approval of the plan by the Regional Administrator, the Director and the Commissioner, Reilly shall submit applications for any necessary permits.

7.2.6. Completion of Well Construction

Within 60 Days of receipt of all permits and approvals pursuant to Section 7.2.5., whichever comes later, Reilly shall complete construction or reconstruction of the wells approved pursuant to Section 7.2.5.

7.2.7. Operation

Within 5 Days of completing connection of SLP 4 to a surface water discharge, Reilly shall commence operation of the gradient control system, and shall pump SLP 4 at its capacity (900 gallons per minute or as near as practicable) from October through April and 300 gallons per minute from May through

September. The pumping rate may be adjusted upward or downward by as much as 250 gallons per minute upon agreement of St. Louis Park, Reilly, the Director, and the Regional Administrator.

7.2.8. Use of SLP 4 for Drinking Water Supply

Reilly or St. Louis Park may request that the Commissioner declare suitable all or portions of the discharge from SLP 4 for use in St. Louis Park's potable water distribution system at any time (1) after Reilly has submitted to the Director, Commissioner, and Regional Administrator plans for a treatment system at SLP 4 capable of treating water to below Drinking Water Criteria as defined in Section 2.2., and these plans have been approved pursuant to Part G. of the Consent Decree; or (2) after Reilly has provided the Commissioner with documentation that the mean plus one standard deviation of at least six consecutive samples collected bimonthly is less than the Drinking Water Criteria for PAH. The Commissioner shall not unreasonably withhold approval of such a request. Notwithstanding such use of SLP 4, Reilly shall continue to pump the well at the rate required by Section 7.2.7. until the requirements of Section 7.2.9. are met.

7.2.9. Cessation

Reilly may submit a request to the Regional Administrator and the Director to cease operating SLP 4 as a gradient control well when Monitoring results obtained pursuant

to Section 7.3. at SLP 4 and at all wells which are north of an imaginary east-west line through W48, including W48 but excluding W23, are less than Drinking Water Criteria for PAH for two consecutive years. Approval of such a request shall not be unreasonably withheld. Notwithstanding this cessation criterion, SLP 4 shall be pumped for a minimum of five years. Approval of such a request shall not be unreasonably withheld. Nothing in this RAP shall be construed to prevent Reilly or St. Louis Park from operating the gradient control system after the cessation criterion is met.

7.3. Monitoring

Reilly shall Monitor wells in the Prairie du Chien-Jordan aquifer in accordance with a sampling plan submitted to and approved by the Regional Administrator and the Director as specified by Section 3. Except as otherwise approved by the Director and Regional Administrator in accordance with Part G. of the Consent Decree, sampling plans for the Prairie du Chien-Jordan aquifer shall provide for Monitoring and water level measurements in the following wells as indicated:

(A) Prairie du Chien-Jordan gradient control wells (as set forth in Section 7.2. above and Section 7.4.1. below) shall be Monitored quarterly for the first year from the Effective Date and semiannually thereafter, or as required by the NPDES permit, whichever is more frequent.

(B) W23 shall be Monitored quarterly for the first year of pumping, and semiannually thereafter.

(C) The following wells shall be Monitored quarterly for five years from the Effective Date, and annually thereafter:

(i) W48

(ii) SLP 6

(iii) SLP 7 or 9

(D) The following wells shall be Monitored semiannually for the first five years from the Effective Date, and annually thereafter:

(i) American Hardware Mutual or Minikahda Golf Course

(ii)

(iii)

(iv)

NON-RESPONSIVE

(v) SLP 10 or 15

(vi) SLP 14

(vii) SLP 16

(viii) W402 or substitute well pursuant to Section 7.2.5.

(ix) W403 or substitute well pursuant to Section 7.2.5.

(x) W119

(E) The following wells shall be Monitored annually:

(i) SLP 5

(ii) [redacted]

(iii)

(iv)

(v)

(vi) W29

(vii) W40

(viii) W70

(ix) W401 or substitute well pursuant to Section 7.2.5.

(F) Water levels shall be measured quarterly for five years from the Effective Date and semiannually thereafter at all wells specified in (A) through (E) above, except for those wells which prove to be inaccessible for such measurements, and at the following wells:

(i) W112

(ii) W32

(iii) SLP8

(iv) SLP10

(v) [redacted]

(vi)

(G) Municipal drinking water supply wells listed in Paragraphs (C), (D), and (E) above shall be Monitored prior to any treatment in place at the well.

7.4. Contingent Actions

7.4.1. Gradient Control System Modification

The Director and Regional Administrator shall review all Monitoring and other data pertinent to the operation of the gradient control well system described in this Section 7. and, at any time after sufficient information is obtained on the distribution of Contaminants and performance of the gradient control system, may notify Reilly that it must submit a plan for gradient control system modification in order to prevent the spread of ground water exceeding the Drinking Water Criteria for PAH defined in Section 2.2. These modifications may include alteration of specified pumping at gradient control wells, additional gradient control wells. With the plan required by this Section, Reilly shall submit proposed cessation criteria consistent with the objective of attaining Drinking Water Criteria for PAH defined in Section 2.2. in the Prairie du Chien-Jordan aquifer for the capture area(s) of any new gradient control well(s) which it proposes. In its plan, Reilly may consider the feasibility of utilizing higher pumping rates at nearby existing industrial or commercial wells if possible. The Director and Regional Administrator shall review the plan in accordance with Part G. of the Consent Decree. Reilly shall obtain such permits as may be necessary in order to implement any such gradient control system modifications.

7.4.2. W48 Pumping Rate

If changes in the rate of usage of ground water from W48 result in a significant reduction in the pumping rate, Reilly shall use its best effort to ensure that the pumping rate is maintained at levels adequate to maintain effective operation of the gradient control system. This may include obtaining an access agreement pursuant to Part P. of the Consent Decree. If Reilly is unable to make such arrangements, the Director and Regional Administrator shall assess the effect of diminution of this pumping stress, and may use their authority under statutes and regulations they administer to maintain the pumping rate or may require gradient control system modifications pursuant to Section 7.4.1.

7.4.3. Treatment

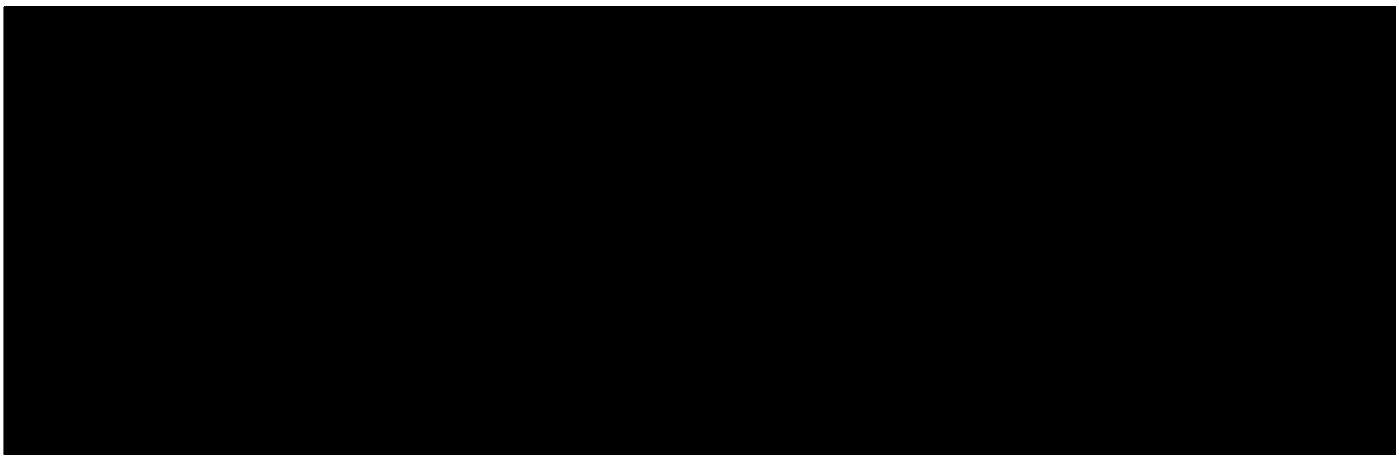
If the concentration of Carcinogenic, PAH, Other PAH, phenanthrene or Phenolics measured at SLP 4, W48, or any other gradient control wells installed in accordance with Section 7.4.1. above exceed the applicable NPDES permit discharge limitations for Carcinogenic PAH, Other PAH or Phenolics or phenanthrene, Reilly shall immediately undertake a sampling program at the affected well. This program shall consist of at least six samples taken one week apart. Upon completion of this program, Reilly shall submit all results to the Director and Regional Administrator. If the mean of these samples exceeds the applicable NPDES permit discharge limitation,

Reilly shall within 90 Days of submitting the test program results submit a plan for construction and operation of a treatment system at the affected well. The plan shall be reviewed by the Regional Administrator and the Director in accordance with Part G. of the Consent Decree. Following receipt of approval of this plan, Reilly shall install the treatment system and shall operate the system until the results of one year of quarterly Monitoring of untreated water at the affected well meet the applicable surface water discharge criteria. Reilly may then request authorization to discontinue treatment from the Regional Administrator and the Director. The Regional Administrator and the Director shall review the request pursuant to Part G. of the Consent Decree.

7.4.4. Contingent Additional Monitoring or Remedial Action

If the analytical result of Monitoring of any active municipal water supply well as required by Section 7.3. above is greater than any Advisory Level or Drinking Water Criterion for Carcinogenic PAH, benzo(a)pyrene and dibenz(a,h)anthracene, or Other PAH, Reilly shall comply with the applicable requirements of Section 12.

[redacted]



8.

ST. PETER AQUIFER

8.1. Remedial Investigation

8.1.1. Remedial Investigation Plan

Within 30 Days of the Effective Date, Reilly shall submit to the Regional Administrator, the Director and the Commissioner, a plan for sampling wells and for installation of five new Monitoring wells to determine the nature and extent of contamination in the St. Peter aquifer. The plan shall specify well location and design. The Director, the Regional Administrator and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

8.1.2. Monitoring Well Construction

Within 120 Days of receiving approval pursuant to Part G. of the Consent Decree, Reilly shall complete construction of the new monitoring wells.

8.1.3. Monitoring

Within 30 Days of completing the monitoring wells pursuant to Section 8.1.2., Reilly shall collect samples for PAH Monitoring and measure water levels at the five new monitoring wells and at W14, W24, W33, W122, W129, W133, P116, and SLP 3. Well SLP 3 and at least six other St. Peter wells shall be re-sampled for PAH Monitoring within 6 months of the first sampling round, and again within 12 months of the first sampling round.

8.1.4. Remedial Investigation Report

Within 90 Days of completing the second Monitoring round pursuant to Section 8.1.3. above, Reilly shall submit to the Regional Administrator and the Director a report that summarizes the results of the St. Peter remedial investigation.

8.2. Feasibility Study

8.2.1. Feasibility Study Plan

Upon completion of the remedial investigation report required by Section 8.1., the Regional Administrator and the Director may determine pursuant to Part H. of the Consent Decree that a feasibility study is required of potential remedial actions for the St. Peter aquifer. Reilly shall submit a plan for a feasibility study to the Regional Administrator and Director within 30 Days of receiving notice pursuant to Part H., that a feasibility study is required. The Regional Administrator and the Director shall review the plan in accordance with Part G. of the Consent Decree.

8.2.2. Feasibility Study Report

Reilly shall submit a report to the Regional Administrator and the Director on the results of the St. Peter feasibility study within 90 Days of receiving approval of the feasibility study plan. The report shall identify and evaluate remedial action alternatives for controlling the spread of water in the St. Peter aquifer that exceeds the Drinking Water Criteria defined in Section 2.2., including alternative

gradient control well systems identified in Section 8.3. and the alternative of continued Monitoring of the St. Peter.

8.3. Remedial Actions

Upon completion of the feasibility study required by Section 8.2. above, the Regional Administrator and the Director may, for the purpose of preventing the further spread of ground water exceeding the Drinking Water Criteria defined in Section 2.2., require Reilly to install and operate a gradient control well system consisting of one or two gradient control wells. Reilly shall submit to the Director and Regional Administrator within 90 Days of receipt of such notification a plan for a gradient control system, including proposed cessation criteria consistent with the purpose of preventing the further spread of ground water exceeding the Drinking Water Criteria defined in Section 2.2. The Director and Regional Administrator shall review the plan in accordance with Part G. of the Consent Decree. Reilly shall implement the plan as approved by the Regional Administrator and the Director.

8.4. Contingent Actions

If the analytical result of Monitoring any active drinking water well in the St. Peter aquifer is greater than any Advisory Level or Drinking Water Criterion for Carcinogenic PAH, benzo(a)pyrene and dibenz(a,h)anthracene, or Other PAH, Reilly shall comply with the applicable requirements of Section 12.

9.

DRIFT AND PLATTEVILLE AQUIFERS

9.1. Source Control

9.1.1. Plan

Within 60 Days of the Effective Date, Reilly shall submit to the Regional Administrator and the Director a plan for installing a source control well system in the Drift-Platteville aquifer. The plan shall specify:

(A) the location, design, and operation of two source control wells, one completed in the Drift and one in the Platteville, each located within 500 feet downgradient of monitoring well W13, and each capable of controlling the flow of ground water from beneath an area defined by Walker Street on the north, Temporary Louisiana Avenue on the east, Lake Street and South Frontage Street Extension on the south, and a north-south line extending from the intersection of Walker Street and West 37th Street on the west;

(B) the location and design of piping to connect the discharge of the two source control wells to the sanitary sewer; and

(C) the procedures to be used in conducting a pumping test at each well, using at least two observation wells per test.

At the same time, Reilly shall submit to the MWCC an application for a sanitary sewer discharge permit and shall submit to the Commissioner of Natural Resources an application for a water appropriation permit. The Regional Administrator and the Director shall review the plan in accordance with Part G. of the Consent Decree.

9.1.2. Construction

Within 120 Days of receiving all necessary permits and approval of the plan as specified in Section 9.1.1., whichever occurs last, Reilly shall complete all construction and testing in accordance with the approved plan and shall submit a report to the Regional Administrator and the Director which presents logs for the well installations, results of the pump tests, and any field adjustments to the approved design.

9.1.3. Operation and Monitoring

Within 10 Days of completing construction as specified in Section 9.1.2., Reilly shall begin to pump each source control well at a monthly average rate of 25 gallons per minute with discharge to the sanitary sewer. Reilly shall Monitor the discharge from each well quarterly for Phenolics and PAH.

9.1.4. Cessation

Reilly may submit a request to the Regional Administrator and Director to cease operating the Drift-Platteville source control system installed in accordance with Sections 9.1.2. and 9.1.3. when the Drift-Platteville

source control system is no longer required to control the source of Contamination in the area defined in Section 9.1.1.(A). Notwithstanding the foregoing, Reilly shall operate the Drift-Platteville source control system for at least five years. Review of a request to cease operating the Drift-Platteville source control system shall be in accordance with Part G. of the Consent Decree and approval shall not be unreasonably withheld.

9.2. Gradient Control

9.2.1. Plan

Within 60 Days of the Effective Date, Reilly shall submit to the Regional Administrator and the Director a plan for installing a gradient control well system in the Drift-Platteville aquifer. The plan shall specify:

(A) the location, design, and operation of a gradient control well completed in the Drift located within 500 feet of Monitoring well W12;

(B) the location and design of piping to connect the discharges of the gradient control well to the sanitary sewer; and

(C) the procedures to be used in conducting a pumping test at this well, using at least two observation wells per test. At the same time, Reilly shall submit to the MWCC an application for a sanitary sewer discharge permit and shall submit to the Commissioner of Natural Resources an application

for a water appropriation permit. The Regional Administrator and the Director shall review the plan in accordance with Part G. of the Consent Decree.

9.2.2. Construction

Within 120 Days of receiving all necessary permits and approval of the plan as specified in Section 9.2.1., whichever occurs last, Reilly shall complete all construction and testing in accordance with the approved plan and shall submit a report to the Regional Administrator and Director which presents the log for the well installation, results of the pump tests, and any field adjustments to the approved design.

9.2.3. Operation and Monitoring

Within 10 Days of completing construction as specified in Section 9.2.2., Reilly shall begin to pump the gradient control well at a monthly average rate of 50 gallons per minute with discharge to the sanitary sewer. Reilly shall Monitor the discharge from the well quarterly for Phenolics and PAH.

9.2.4. Cessation

Reilly may submit a request to the Regional Administrator and Director to cease operating the Drift-Platteville gradient control system installed in accordance with Sections 9.2.2. and 9.2.3. when the Drift-Platteville gradient control system is no longer required to limit the spread of Contamination into the area delineated

by the buried bedrock valley as mapped by Hult and Schoenberg in USGS Water Supply Paper 2211, Plate 2. Review of the request shall be in accordance with Part G. of the Consent Decree and approval shall not be unreasonably withheld. Notwithstanding the foregoing, Reilly shall operate the Drift-Platteville gradient control system for at least five years.

9.3. Northern Area Remedial Investigation

9.3.1. Remedial Investigation Plan

Within 60 Days of the Effective Date, Reilly shall submit to the Regional Administrator, the Director and the Commissioner a plan for installing additional monitoring wells in the Drift-Platteville aquifer to further define the nature and extent of Contamination. The plan shall specify six wells completed in the Drift or Platteville aquifers within an area bounded by West 32nd Street to the north, Alabama Avenue to the east, Highway 7 to the south, and Louisiana Avenue to the west. The Regional Administrator, Director and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

9.3.2. Monitoring Well Construction.

Within 60 Days of receiving approval pursuant to Part G. of the Consent Decree, Reilly shall complete construction of the new monitoring wells.

9.3.3. Monitoring

Within 30 Days of completing the monitoring wells pursuant to Section 9.3.2., Reilly shall collect samples for PAH and Phenolics Monitoring and measure water levels at the new Monitoring wells and at wells W136 and W131. These wells shall be re-sampled for PAH and Phenolics Monitoring within 6 months of the first sampling round.

The Regional Administrator, the Director and the Commissioner may request that one or more of the samples collected during the first and/or second sampling rounds be subjected to an extended analysis instead of PAH and Phenolics. The extended analysis shall include priority pollutants volatiles, acids, base/neutrals and metals (40CFR Part 122, Appendix D) plus ammonia, chloride, sodium and sulphate. For every such sample that is subjected to an extended analysis instead of PAH and Phenolics, one sample for PAH and Phenolics monitoring during the first year after the Effective Date, pursuant to Section 9.6, shall be eliminated.

9.3.4. Remedial Investigation Report

Within 90 Days of completing the second Monitoring round pursuant to Section 9.3.3. above, Reilly shall submit to the Regional Administrator and the Director a report that summarizes the results of the Drift-Platteville remedial investigation.

9.4. Northern Area Feasibility Study

9.4.1. Feasibility Study Plan

Within 30 Days of completion of the remedial investigation required by Section 9.3., Reilly shall submit a plan for a feasibility study to the Regional Administrator and Director. The Regional Administrator and the Director shall review the plan in accordance with Part G. of the Consent Decree.

9.4.2. Feasibility Study Report

Reilly shall submit a report on the results of the Drift-Platteville feasibility study within 90 Days of receiving approval of the feasibility study plan. The report shall identify and evaluate remedial action alternatives for limiting the further spread of Contamination located within the area defined in Section 9.3.1. above, including alternative gradient control well systems identified in Section 9.5. and the alternative of continued Monitoring of the Drift-Platteville.

9.5. Northern Area Remedial Actions

9.5.1. Implementation

Upon completion of the feasibility study required by Section 9.4. above, the Regional Administrator and the Director may, for the purpose of limiting the further spread of Contamination located within the study area defined in Section 9.3.1. above, require Reilly to implement a remedy of installing and operating one or more gradient control wells.

Reilly shall submit to the Regional Administrator and the Director within 90 Days of receipt of such notification a plan for such remedy. With the plan required by this Section, Reilly shall submit proposed cessation criteria consistent with the purpose of limiting to limit the spread of Contamination located within the study area described in Section 9.3.1. The Regional Administrator and the Director shall review the plan in accordance with Part G. of the Consent Decree. Reilly shall implement the plan as approved by the Regional Administrator and the Director.

9.5.2. Cessation

Reilly may submit a request to the Regional Administrator and Director to cease operating the Northern Drift-Platteville area remedy approved in accordance with Section 9.5.1. when operation of this remedy is no longer required to limit the spread of Contamination located within the study area described in Section 9.3.1. Review of the request shall be in accordance with Part G. of the Consent Decree and approval shall not be unreasonably withheld.

9.6. Monitoring

The annual sampling plan required by Sections 3.2., 3.3 and 3.4. shall be designed to assess changes in the extent of Contamination and to evaluate the effectiveness of the source and gradient control well systems and any other remedy implemented in the Drift-Platteville aquifer. For the first

year, Drift-Platteville Monitoring shall consist of semiannual Monitoring of 30 wells for Phenolics and PAH. The number of samples for PAH and Phenolics Monitoring in the first year after the Effective Date shall be reduced by one sample for every sample subjected to an extended analysis pursuant to Section 9.3.3. For the second and third years after the Effective Date, Drift-Platteville Monitoring shall consist of Monitoring 30 wells annually for Phenolics and PAH. Thereafter, 20 wells shall be Monitored biannually for Phenolics and PAH. Two of the above sampling events shall be conducted concurrently with the Northern Area remedial investigation required by Section 9.3. Reilly shall measure water levels in the sampled wells whenever Monitoring samples are collected.

9.7. Contingent Actions

9.7.1. Source Control Contingencies.

The Regional Administrator and the Director shall review all Monitoring or other data pertinent to the operation of the source control well system and the movement of PAH and Phenolic Contaminants in the Drift-Platteville, and, at any time after at least three rounds of Monitoring pursuant to Section 9.6., may require Reilly to install an additional source control well(s) or to modify the operation of the source control well system installed pursuant to Section 9.1. above, in accordance with Part H of the Consent Decree in order to

control the source of Contamination in the area defined in Section 9.1.1.(A). Within 90 Days of receipt of notification of such a determination by the Regional Administrator and the Director, Reilly shall submit to the Regional Administrator and the Director a plan and schedule for implementing the action(s). The Regional Administrator and the Director shall review this plan in accordance with Part G. of the Consent Decree. Following receipt of approval of this plan, Reilly shall implement the requested action(s) in accordance with the approved plan. Nothing in this RAP shall be construed to prevent Reilly from requesting the Regional Administrator and the Director to allow modifications to the operation of the source control well system installed and operated pursuant to Section 9.1. above.

9.7.2. Gradient Control Contingencies

The Regional Administrator and the Director shall review all Monitoring or other data pertinent to the operation of the gradient control well system and the movement of PAH and Phenolic Contaminants in the Drift-Platteville, and, at any time after at least three rounds of Monitoring pursuant to Section 9.6., may require Reilly to install an additional gradient control well(s) in the Drift-Platteville or to modify the operation of the gradient control well system installed and operated pursuant to Section 9.2. above, in accordance with Part H of the Consent Decree in order to prevent the spread of

Contamination into the area delineated by the buried bedrock valley as mapped by Hult and Schoenberg in USGS Water Supply Paper 2211, Plate 2. Within 90 Days of receipt of notification of such a determination by the Regional Administrator and the Director, Reilly shall submit to the Regional Administrator and the Director a plan and schedule for implementing the action(s). The Regional Administrator and the Director shall review this plan in accordance with Part G. of the Consent Decree. Following receipt of approval of this plan, Reilly shall implement the requested action(s) in accordance with the approved plan. Nothing in this RAP shall prevent Reilly from requesting the Regional Administrator and the Director to allow modifications to the operation of the gradient control well system installed and operated pursuant to Section 9.2. above.

9.7.3. Northern Area Remedy Contingencies

The Regional Administrator and the Director shall review all Monitoring or other data pertinent to the remedy implemented pursuant to Section 9.5. above and the movement of PAH and Phenolic Contaminants in the Drift-Platteville, and, at any time after at least three rounds of Monitoring pursuant to Section 9.6. and after any remedy implemented pursuant to Section 9.5. has begun, may require Reilly to install an additional gradient control well(s) or otherwise modify the remedy installed and operated pursuant to Section 9.5. above in accordance with Part H of the Consent Decree, in order to limit

the further spread of any Contamination located within the area defined in Section 9.3.1. Within 90 Days of receipt of notification of such a determination by the Regional Administrator and the Director, Reilly shall submit to the Regional Administrator and the Director a plan and schedule for implementing the action(s). The Regional Administrator and Director shall review this plan in accordance with Part G. of the Consent Decree. Following receipt of approval of this plan, Reilly shall implement the requested action(s) in accordance with the approved plan. Nothing in this RAP shall prevent Reilly from requesting the Regional Administrator and the Director to allow modifications to the operation of any gradient control well system installed and operated pursuant to Section 9.5. above.

10.

LEAKING MULTI-AQUIFER WELLS

10.1. Multi-Aquifer Wells Open to the Mt. Simon-Hinckley, Ironton-Galesville, or Prairie du Chien-Jordan Aquifers

10.1.1. Investigation Plan

Within one year of the Effective Date, Reilly shall submit to the Regional Administrator, the Director and the Commissioner a plan for investigating suspected multi-aquifer wells which may be leaking water exceeding Drinking Water Criteria for PAH or 10 micrograms per liter Phenolics into the Mt. Simon-Hinckley aquifer, the Ironton-Galesville aquifer, or areas of the Prairie du Chien-Jordan aquifer located outside of the capture area of the Prairie du Chien-Jordan aquifer gradient control system operated pursuant to Section 7.2., and, if applicable, Section 7.4.1. For purposes of this Section, the southern boundary of the capture area of the Prairie du Chien-Jordan aquifer gradient control well system operated pursuant to Section 7.2. is defined as Excelsior Boulevard west of Highway 169/100 and West 42nd Street east of Highway 169/100; the eastern boundary as France Avenue; the northern boundary as a line extending from well SLP 7 to the intersection of France Avenue and Minnetonka Blvd. and west from SLP 7 to Hennepin County Road 18; and the western boundary as Hennepin County Road 18. The plan shall describe the

investigation techniques to be used, which shall include at a minimum for each well: static water level measurements, water quality Monitoring, spinner logging, caliper logging, and E- or gamma logging. Additional techniques, such as down-hole TV logging, may also be used. The Regional Administrator, the Director and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

10.1.2. Investigation and Report

Within one year of receipt of approval of the investigation plan pursuant to Section 10.1.1., Reilly shall complete a multi-aquifer well investigation in accordance with the approved plan and shall report the findings to the Regional Administrator, the Director and the Commissioner, and recommend which leaking multi-aquifier wells, if any, should be abandoned or reconstructed.

10.1.3. Report Evaluation

For any of the wells investigated pursuant to Section 10.1.1. which display interaquifer flow of water which exceeds Drinking Water Criteria for PAH or 10 micrograms per liter Phenolics, the Director, Regional Administrator and the Commissioner shall consider: the rate of any multi-aquifer flow; the quality of any water being leaked; the likely fate and impacts of any leaking Contaminants, considering ground water flow and use patterns in the aquifer(s) of concern and the impact of any gradient control well(s); and the cost of

abandoning or reconstructing the leaking well(s). Based on this evaluation, the Director, Regional Administrator and the Commissioner may require Reilly to abandon or reconstruct the well(s) in accordance with Part H of the Consent Decree. If Reilly abandons an active well, Reilly shall provide an alternative water supply which provides water of equivalent quality and quantity at a cost to the owner of the affected well no greater than that of pumping ground water from the affected well.

10.1.4. Well Abandonment Plan

If the Director, the Regional Administrator and the Commissioner determine pursuant to Section 10.1.3. that Reilly shall abandon or reconstruct any wells, then Reilly shall submit to the Director and Regional Administrator, within 90 Days of receipt of such notification, a plan for abandoning or reconstructing the well(s) specified by such notification and, if necessary, providing the well owner(s) with an alternative water supply. The Director, the Regional Administrator and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

10.1.5. Well Abandonment

Within 90 Days of receipt of approval of the plan specified in Section 10.1.4., Reilly shall abandon or reconstruct the well(s) required in accordance with the approved plan.

10.2. Multi-Aquifer Wells Open to the St. Peter Aquifer

10.2.1. Investigation Plan

Within 180 Days of receipt of the decision by the Regional Administrator, the the Director and the Commissioner with regard to remedial action in the St. Peter aquifer pursuant to Section 8.3., Reilly shall submit to the Regional Administrator, the Director and the Commissioner a plan for investigating suspected multi-aquifer wells which are open to the St. Peter aquifer and which may be leaking water exceeding Drinking Water Criteria for PAH or 10 micrograms per liter Phenolics into areas of the St. Peter aquifer located outside of the capture area of any St. Peter aquifer gradient control system operated pursuant to Section 8.3. The plan shall describe the investigation techniques to be used. The Regional Administrator, the Director and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

10.2.2. Investigation and Report

Within one year of receipt of approval of the investigation plan pursuant to Section 10.2.1., Reilly shall complete a multi-aquifer well investigation in accordance with the approved plan and shall report the findings to the Regional Administrator, the Director and the Commissioner and recommend which leaking multi-aquifer wells, if any, should be abandoned or reconstructed.

10.2.3. Report Evaluation

For any of the wells investigated pursuant to Section 10.2.1. which display interaquifer flow of water which exceeds Drinking Water Criteria for PAH or 10 micrograms per liter Phenolics, the Director, the Regional Administrator and the Commissioner shall consider: the rate of any multi-aquifer flow; the quality of any water being leaked; the likely fate and impacts of any leaking Contaminants, considering ground water flow and use patterns in the aquifer(s) of concern and the impact of any gradient control well(s); and the cost of abandoning or reconstructing the leaking well(s). Based on this evaluation, the Director, the Regional Administrator and the Commissioner may require Reilly to abandon or reconstruct the well(s) in accordance with Part H of the Consent Decree. If Reilly abandons an active well, Reilly shall provide an alternative water supply which provides water of equivalent quality and quantity at a cost to the owner of the affected well no greater than that of pumping ground water from the affected well.

10.2.4. Well Abandonment Plan

If the Director, the Regional Administrator and the Commissioner determine pursuant to Section 10.2.3. that Reilly shall abandon or reconstruct any wells, then Reilly shall submit to the Director, the Regional Administrator and the Commissioner, within 90 Days of receipt of such notification, a

plan for abandoning or reconstructing the well(s) specified by such notification and, if necessary, providing the well owner(s) with an alternative water supply. The Director, the Regional Administrator and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

10.2.5. Well Abandonment

Within 90 Days of receipt of approval of the plan specified in Section 10.1.4., Reilly shall abandon or reconstruct the well(s) required in accordance with the approved plan.

10.3. Contingent Actions

10.3.1. Investigation Plan

If the capture area of any gradient control well system installed in the Prairie du Chien-Jordan or the St. Peter aquifers decreases as a result of ceasing operation or decreasing pumping rates in accordance with this RAP, the Director, the Regional Administrator and the Commissioner may require Reilly to submit a plan to investigate any multi-aquifer wells which may be leaking water exceeding the Drinking Water Criteria for PAH or 10 micrograms per liter Phenolics into areas of the aquifer that were formerly controlled by the gradient control well system. The Regional Administrator, the Director and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

10.3.2. Investigation and Report

Within one year of receipt of approval of the investigation plan pursuant to Section 10.3.1., Reilly shall complete a multi-aquifer well investigation in accordance with the approved plan and shall report the findings to the Regional Administrator, the Director and the Commissioner and recommend which leaking multi-aquifer wells, if any, should be abandoned or reconstructed.

10.3.3. Report Evaluation

For any of the wells investigated pursuant to Section 10.3.1. which display interaquifer flow of water which exceeds Drinking Water Criteria for PAH or 10 micrograms per liter Phenolics, the Director, the Regional Administrator and the Commissioner shall consider: the rate of any multi-aquifer flow; the quality of any water being leaked; the likely fate and impacts of any leaking Contaminants, considering ground water flow and use patterns in the aquifer(s) of concern and the impact of any gradient control well(s); and the cost of abandoning or reconstructing the leaking well(s). Based on this evaluation, the Director, the Regional Administrator and the Commissioner may require Reilly to abandon or reconstruct the well(s) in accordance with Part H of the Consent Decree. If Reilly abandons an active well, Reilly shall provide an alternative water supply which provides water of equivalent quality and quantity at a cost to the owner of the affected

well no greater than that of pumping ground water from the affected well.

10.3.4. Well Abandonment Plan

If the Director, the Regional Administrator and the Commissioner determine pursuant to Section 10.3.3. that Reilly shall abandon or reconstruct any wells, then Reilly shall submit to the Director, the Regional Administrator and the Commissioner, within 90 Days of receipt of such notification, a plan for abandoning or reconstructing the well(s) specified by such notification and, if necessary, providing the well owner(s) with an alternative water supply. The Director, the Regional Administrator and the Commissioner shall review the plan in accordance with Part G. of the Consent Decree.

10.3.5. Well Abandonment

Within 90 Days of receipt of approval of the plan specified in Section 10.3.4., Reilly shall abandon or reconstruct the well(s) required in accordance with the approved plan.

11.

NEAR-SURFACE CONTAMINATION

11.1. Soil Investigation

11.1.1. Plan

Within 90 Days of the Effective Date, Reilly shall submit to the Director and the Regional Administrator a plan for installation of shallow borings and analysis of resulting soil cores for the purpose of determining the extent of subsurface Contamination south of the Site. The plan shall provide for borings in an area bounded by Lake Street on the north; Monitor Street and an imaginary straight-line extension of Monitor Street to Methodist Hospital on the east; Minnehaha Creek on the south; and Taft Avenue and an imaginary straight-line extension of Taft Avenue to Minnehaha Creek on the west. The plan shall provide for at least 15 but not more than 25 borings, each boring to have a depth of at least 35 feet but not deeper than the top of the Platteville formation. The plan shall provide for at least 15 but no more than 45 soil cores to be analyzed for benzene extractables and/or Phenolics. The Director and Regional Administrator shall review the plan in accordance with Part G. of the Consent Decree.

11.1.2. Completion

Within 90 Days of receipt of approval of the plan, Reilly shall complete installation and analysis of the borings in accordance with Section 11.1.1. above.

11.1.3. Report

Within 60 Days of completing installation of borings as required by Section 11.1.2. above, Reilly shall submit to the Director and Regional Administrator a report on the results of the above borings, including, but not limited to a map of the area investigated, the location of each boring, boring logs, analytical results, and visual or olfactory observations of Contamination.

11.2. Notices in Deed

Within 180 Days of completing the installation of borings as required by Section 11.1. above, the Parties owning property in the area described in Section 11.1 on which a release of Contaminants resulting from operations at the site has occurred or is occurring, shall file an affidavit with the Recorder of Deeds of Hennepin County which complies with Minn. Stat. § 115B.16, Subd.2 (1984). Any Party filing such an affidavit shall submit a copy of such recorded affidavit to the Director and the Regional Administrator within 14 Days of such Recording. Within 180 days of completing the installation of borings as required by Section 11.1. above, St. Louis Park shall also by this date submit to the Director and the Regional

Administrator the location and owners of other properties within the areas described in Section 11.1. above, on or under which a release has occurred or is continuing to occur.

11.3. Louisiana Avenue/State Trunk Highway 7 Intersection

11.3.1. Construction

This RAP shall not be construed to impede or delay the construction of an at-grade intersection at Louisiana Avenue and State Trunk Highway 7 in accordance with plans and specifications for this project on file with the MPCA as of January 1, 1985. If the plans and specifications for this project are changed so as to substantially alter the impact of the construction on soil or ground water contamination, St. Louis Park shall obtain written approval of these changes by the Director and Regional Administrator prior to implementing such changes.

11.3.2. Dewatering

If construction plans for the project specify the dewatering of any soils, St. Louis Park shall provide means for collecting any Contaminated water resulting from dewatering in this area and for disposal to the sanitary sewer, unless agreed otherwise by the Director and Regional Administrator.

11.3.3. Cancellation or Delay

If the Director notifies Reilly that the Minnesota Department of Transportation has not or will not have committed funds by October 31, 1989, for construction of an at-grade

intersection at Louisiana Avenue and State Trunk Highway 7; or, if St. Louis Park prior to this date notifies Reilly that it will not seek funding for construction of this intersection, Reilly shall submit to the Director and Regional Administrator within six months of receipt of such notification a plan to fill, grade, and cover all bog areas between Walker Street and Lake Street in order to promote drainage and minimize infiltration of precipitation. The plan shall provide for:

(A) filling of the remaining bog areas with clean fill;

(B) covering undeveloped areas within the area bounded by Walker Street, Louisiana Avenue, Lake Street and South Frontage Road Extension, and an imaginary north-south line through the intersection of Walker Street and West 37th Street with a low-permeability cover and sufficient topsoil to support a vegetative cover;

(C) sloping the area to promote drainage to a storm water collection system; and

(D) establishment and maintenance of a perennial grass cover.

The plan shall show the proposed placement of fill and shall detail arrangements with property owners. The Director and Regional Administrator shall review the plan in accordance with Part G. of the Consent Decree. Within 6 months of receipt

of approval, Reilly shall implement the plan as approved by the Director and Regional Administrator.

11.4. Final Development of the Site

11.4.1 Interim Site Development Plan

(A) Within 180 Days of the Effective Date, St. Louis Park and the HRA each shall submit to the Regional Administrator and the Director a plan (hereinafter "Interim Site Development Plan"). providing a full description of the actions they will take, pending future development, at the respective areas of the Site owned by them located west of Louisiana Avenue. St. Louis Park and the HRA shall coordinate during preparation of their respective plans so as to avoid inconsistencies.

(B) Each Interim Site Development Plan shall include a description of the actions to be implemented pending future development, including, but not limited to, the following:

(1) actions to minimize infiltration of precipitation into soils and ground water at the Site;

(2) actions to direct runoff from the Site to a storm water collection system;

(3) actions to minimize the need to excavate Contaminated Soils or Hazardous Substances;

(4) actions to minimize the possibility that Hazardous Substances which may be located beneath the surface may rise to the surface at the Site;

(5) actions to prevent any soils or other materials which may be excavated at the Site from creating a nuisance (including odor problems) to area residents;

(6) In the HRA plan, actions to landscape the existing stockpile of soils and other material located in the southwest corner of the site near Walker Street, so as to effectively minimize infiltration of precipitation into and erosion of the stockpile; and,

(7) actions to place an adequate soil and vegetative cover as needed throughout the Site to prevent soil erosion, minimize infiltration of precipitation, avoid nuisances (including odor problems) and otherwise protect the integrity of the Site.

(C) Each Interim Site Development Plan shall provide a schedule for implementation of each action described in that Plan. The schedule in each Plan shall provide for completion of all actions by no later than one year after approval of the Plan by the Regional Administrator and the Director.

(D) The Regional Administrator and the Director shall review each Interim Site Development Plan in accordance with Part G. of the Consent Decree.

(E) St. Louis Park and the HRA shall each comply with their own Interim Site Development Plan as approved by the Regional Administrator and the Director.

11.4.2 Site Maintenance

Subsequent to implementation of the Interim Site Development Plan in accordance with Section 11.4.1., St. Louis Park and the HRA shall maintain their respective portions of the Site such that the objectives stated in 11.4.1.(B) are continually met. In the event that the measures taken pursuant to the Interim Site Development Plan prove to be inadequate to achieve these objectives, St. Louis Park and the HRA shall take such additional measures as the Regional Administrator and the Director may require to ensure that the objectives are met.

11.4.3 Future Site Development

This Section 11.4.3 establishes the conditions under which future development of the Site west of Louisiana Avenue may occur.

(A) Prior to undertaking any construction on their respective areas of the Site located west of Louisiana Avenue, St. Louis Park and/or the HRA, as appropriate, shall submit a plan to the Regional Administrator and the Director which details the proposed construction, and which includes, but is not limited to, the following:

(1) plans for construction of buildings;

(2) safety provisions to protect construction workers from exposure to hazardous substances;

(3) plans, commensurate with the intended construction, for investigation and excavation of soils,

including a description of the methods to be used (both before and during construction) for evaluating soil and other materials which may be excavated to determine if they are hazardous under applicable State and Federal hazardous waste rules;

(4) plans for disposal, in compliance with all applicable State and Federal laws and regulations, of non-hazardous soils and other materials and hazardous substances which may be excavated during construction, including specific locations at which materials will be disposed of;

(5) plans to assure that, if hazardous substances are encountered at any time during construction, they will be properly handled and disposed of and that written assurance from a facility(ies) authorized to accept such waste will be submitted to the Regional Administrator and the Director; and

(6) plans for prevention of nuisance conditions during construction, including plans for compliance with Minnesota Rules Parts 7005.0900-7005.0960 (1983) or their then-applicable equivalents.

(B) The Regional Administrator and the Director shall review each construction plan in accordance with Part G. of this Consent Decree.

(C) St. Louis Park and the HRA shall not convey any interest in property for their respective areas of the site

located west of Louisiana Avenue unless the agreement includes a covenant running with the land that assures that each subsequent purchaser or successor in interest agrees shall comply with the requirements of this Section 11.4.3.

(D) St. Louis Park, the HRA, and any subsequent purchasers or successors in interest, as appropriate, shall each comply with the construction plan as approved by the Regional Administrator and the Director.

(E) This Section 11.4.3 does not constitute a waiver of any permitting or other requirements which may apply to any proposed construction at the Site.

11.4.4. Stockpiling or Disposal of Soil

After the Site Development Plan required by Section 11.4.1. is implemented, no soil excavated for any purpose from the Site, except for topsoil placed after closure of the Reilly plant which is not contaminated visually and does not have a noticeable odor of creosote or coal tar, shall be stockpiled or otherwise placed, either temporarily or permanently, anywhere on the Site. If soil or any other materials excavated from the Site for any reason after the Effective Date is deemed hazardous by the EPA or MPCA pursuant to Federal or State hazardous waste rules, the soil or hazardous materials shall be moved to a permitted hazardous waste facility approved pursuant to Part T of the Consent Decree, and St. Louis Park and HRA, or other owner of property on the Site, as appropriate, shall

comply with all notification, disclosure, and transportation requirements of Federal and State hazardous waste rules.

12.

CONTINGENT ACTIONS FOR MUNICIPAL
DRINKING WATER SUPPLY WELLS

12.1. Contingent Monitoring

12.1.1. Exceedance of Advisory Levels

If the analytical result of any sample taken from an active municipal drinking water well under the Monitoring requirements of Sections 3., 4.3., 5.1., 6.2.1., 7.3., or 8.4. above exceeds an Advisory Level, Reilly shall take another sample within seven Days of receiving the analytical results and analyze this sample. If the results of the second sample are below the Advisory Levels, a third sample shall be taken by Reilly within seven Days of receiving the results of the second sample. If the third sample is below the Advisory Levels, Monitoring of the affected well shall revert to its normal schedule. If the analytical result of the second or third sample exceeds an Advisory Level, the Director, Commissioner and the Regional Administrator shall be notified by Reilly immediately. Subsequent samples shall be taken by Reilly monthly until such time as either:

(A) three consecutive samples yield results less than the Advisory Levels, in which case the sampling interval shall revert to the level specified for the affected well in Sections 3., 4.3., 5.1., 6.2.1., 7.3., or 8.4. above; or

(B) a sample yields results greater than a Drinking Water Criterion for PAH, in which case the requirements of Section 12.1.2., below, apply.

12.1.2. Exceedance of Drinking Water Criteria

(A) If the analytical result of any sample taken from an active municipal drinking water well pursuant to Section 12.1.1 exceeds the Drinking Water Criterion for Carcinogenic PAH, benzo(a)pyrene and dibenz(a,h)anthracene, or Other PAH, the Director, Commissioner and the Regional Administrator shall be immediately notified by Reilly, and another sample shall be taken by Reilly within three Days of receiving the results of the first sample and analyzed. If the analytical result of the second sample is less than the Drinking Water Criteria for PAH but greater than an Advisory Level, a third sample shall be taken by Reilly within seven Days of receiving the results of the second sample and analyzed. If the results of this third sample are less than the Drinking Water Criteria, but greater than the Advisory Level, Reilly shall comply with the monthly sampling frequency specified in Section 12.1.1. above.

(B) If the analytical result of the second or third sample taken pursuant to Section 12.1.2. (A) above is greater than the Drinking Water Criterion for Carcinogenic PAH, benzo(a)pyrene and dibenz(a,h)anthracene, or Other PAH, Reilly shall Monitor the well weekly until such time as either: (1) three consecutive samples yield results below Drinking Water Criteria for PAH, in which case Monitoring of the well shall revert to the normal schedule (including Advisory Level Monitoring as specified by Section 12.1.1. above if applicable); or, (2) three consecutive samples yield results above a Drinking Water Criterion for PAH, in which case Reilly shall immediately notify the Director, Commissioner and the Regional Administrator. The Commissioner may then require the affected well to be taken out of service, in which case Reilly shall undertake the contingent actions specified in Section 12.2. below.

12.1.3. Analytical Turn-around Time

All Monitoring conducted pursuant to Section 12.1. shall be on a 21-Day turn-around time basis in accordance with Section 2.8.

12.2. Contingent Drinking Water Treatment

12.2.1. Applicability

This Section 12.2 shall apply in the event that Monitoring of active municipal water supply wells in the Mt. Simon-Hinckley, Ironton-Galesville, Prairie du Chien-Jordan, or St. Peter aquifers, pursuant to Section 12.1. above, indicates that untreated water from any such well exceeds a Drinking Water Criterion for PAH at the point at which the water is introduced to the water distribution system but before dilution with water from any other source. This Section 12.2 does not apply to SLP 10 and 15, which have specific requirements contained in Section 4. above.

12.2.2. Options for Dealing With Contaminated Municipal Drinking Water Supply Wells

In the event the conditions specified in Section 12.1.2.(B)(2) above are met, the Commissioner may require the affected well to be removed from service, in which case Reilly shall submit to the Director, Commissioner and the Regional Administrator a plan for responding to the well closure. The plan may recommend that the well be left out of service, in which case the potential effects of altered migration of Contaminants in the affected aquifer due to elimination of pumping the well shall be assessed, and a proposed remedy for these effects shall be included. In addition, Reilly shall propose a remedy for restoring the lost water supply through

treatment, which may include existing treatment, or providing alternative supplies. If Reilly proposes treatment, a conceptual design for a treatment system and monitoring plan shall be included in the plan. In the event that well SLP 6 is determined to exceed Drinking Water Criteria for PAH pursuant to Section 12.1.2.(B), Reilly shall submit a plan for treatment of this well so that the pumping stress at this well is maintained.

12.2.3. Construction and Agency Approval

The Director, Commissioner, and Regional Administrator shall review the proposed remedial action, taking into account the water supply needs of the affected city as well as the effectiveness of the proposed remedy in removing Contaminants from drinking water, if applicable, and the effect of the proposed remedy on the movement of Contaminants in the aquifer. Reilly shall construct the remedy as approved by the Director, Commissioner and the Regional Administrator in accordance with Part G. of the Consent Decree and upon approval of the affected city.

12.2.4. Monitoring

Reilly shall Monitor any treatment system constructed pursuant to this Section 12.2 in accordance with the Monitoring plan as approved by the Regional Administrator and the Director under Section 12.2 in accordance with Part G. of the Consent Decree.

12.2.5. Cessation

Reilly shall operate and maintain any treatment system constructed pursuant to this Section until the cessation criteria defined in Section 4.4. are met.

APPENDIX A

PAH COMPOUNDS TO BE MONITORED

A.1. List of Compounds To Be Monitored on a Routine Basis

A.1.1. Carcinogenic PAH

Whenever this RAP specifies Monitoring for Carcinogenic PAH, the analysis shall include the following PAH compounds:

benz(a)anthracene	(56-55-3)*
benzo(b)fluoranthene	(205-99-2)
benzo(j)fluoranthene	(205-82-3)
benzo(ghi)perylene	(191-24-2)
benzo(a)pyrene	(50-32-8)
chrysene	(218-01-9)
dibenz(a,h)anthracene	(53-70-3)
indeno(1,2,3-cd)pyrene	(193-39-5)
quinoline	(91-22-5)

A.1.2. Other PAH

Whenever this RAP specifies Monitoring for Other PAH, the analysis shall include the following PAH compounds:

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* Chemical Abstracts Service registry number.

acenaphthene	(83-32-9)
acenaphthylene	(208-96-8)
acridine	(260-94-6)
anthracene	(120-12-7)
benzo(k)fluoranthene	(207-08-9)
2,3-benzofuran	(271-89-6)
benzo(e)pyrene	(192-97-2)
benzo(b)thiophene	(95-15-8)
biphenyl	(92-15-8)
carbazole	(86-74-8)
dibenzofuran	(132-64-9)
dibenzothiophene	(132-65-0)
2,3-dihydroindene	(496-11-7)
fluoranthene	(206-44-0)
fluorene	(86-73-7)
indene	(95-13-6)
indole	(120-72-9)
1-methylnaphthalene	(90-12-0)
2-methylnaphthalene	(91-57-6)
naphthalene	(91-20-3)
perylene	(198-55-0)
phenanthrene	(85-01-08)
pyrene	(129-00-0)

A.2. Extended List of Carcinogenic PAH

The following PAH are suspected human carcinogens, but have not

te in samples of drinking water
uis Park area. The following PAH,
in the calculation of Carcinogenic
y special analysis required by
lyzed under routine Monitoring

(195-19-7)
(215-58-7)
(192-65-4)
(189-64-0)
(189-55-9)

(57-97-6)
(56-49-5)

i.. chis Appendix are analyzed
ompliance with any of the
Levels, or cessation criteria
values shall not be counted
um of Carcinogenic PAH, Other

to Section 3. shall not be
eries when determining
g Water Criteria, Advisory
ied by this RAP. The
ity control plan required
cate the expected surrogate
al methods required by this

ks

hall be collected and analyzed
n each year's sampling plan
:al results from field and
e consideration when determining
king Water Criteria, Advisory
fined by this RAP.